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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,700	12/13/2005	Kayoko Fukasawa	63034 (51969)	5321

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EXAMINER
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CHANG, JUNGWON

ART UNIT	PAPER NUMBER
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2454

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,700	<b>Applicant(s)</b> FUKASAWA ET AL.	
	<b>Examiner</b> JUNGWON CHANG	<b>Art Unit</b> 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 56-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 56-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Action is in response to preliminary amendment filed on 3/11/05. Claims 1-55 have been canceled, and new claims 56-78 have been added.
2. Claims 56-78 are presented for examination.
3. Information Statement Disclosure filed on 9/27/05 has been considered.
4. Claim 62 is objected to because of the following informalities:  
Line 2, "realted information" should be "related information".  
Correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 56-78 are rejected under 35 U.S.C. 102(e) as being anticipated by  
Makela et al, (US 7,099,687), hereinafter Makela.

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7. As to claim 56, Makela discloses the invention as claimed, including a method of providing at least one bearer service through a heterogenous wireless network for at least one application running at a mobile endpoint (col. 7, lines 3-30),

characterized by the steps:

detecting an operational context as characteristics of the mobile endpoint, characteristics of at least one application running at the mobile endpoint (col. 4, lines 1-8, "video and telephone applications"; col. 7, lines 40-57, "the application is e.g. a networked game"), characteristics of application data to be transferred and/or availability and capability of at least one bearer service (cols. 3-4, "TABLE I"; col. 3, line 54 – col. 4, line 8; col. 4, lines 23-30);

dynamically selecting at least one bearer service and setting up/tearing down related wireless connections provided through the heterogenous wireless network (col. 7, lines 20-30) according to the determined operational context (col. 7, lines 3-19, "channels for communication...according to the properties of the selected bearer service").

8. As to claim 57, Makela discloses method according to claim 56, characterized in that it comprises the step of updating bearer services and/or related bearer capabilities in a bearer configuration memory (222, fig. 2C; cols. 3-4, "TABLE I"; col. 9, lines 55-64).

9. As to claim 58, Makela discloses method according to claim 57, characterized in that the step of updating bearer services and/or related bearer capabilities in a bearer

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configuration, memory is executed event driven or at pre-determination points in time (222, fig. 2C; cols. 3-4, "TABLE I"; col. 9, lines 55-64).

10. As to claim 59, Makela discloses method according to claim 56, characterized in that it comprises the step of registering active applications running at the mobile endpoint (col. 3, lines 40-53, "to allow the use of different applications in such a mobile terminal"; col. 7, lines 40-57, "program code of this application may have been loaded earlier from a server 10...").

11. As to claim 60, Makela discloses method according to claim 59, characterized in that the step of registering active applications further registers application requirements (col. 4, lines 1-8; col. 7, lines 40-57).

12. As to claim 61, Makela discloses method according to claim 60, characterized in that application requirements are selected from a group comprising application configuration requirement and application priority (cols. 3-4, "TABLE I, user priority").

13. As to claim 62, Makela discloses method according to claim 59, characterized in that application related information is stored in a selection table (cols. 3-4, "TABLE I").

14. As to claim 63, Makela discloses method according to claim 59, characterized in that the step of dynamically selecting bearer services further comprises the steps of:

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negotiating at least one communication request existing for the active application against a bearer capability of the heterogeneous wireless network; and updating at least one assignment of an active application to an available bearer service in the heterogeneous wireless network in accordance with a negotiation result (col. 4, line 57- col. 5, line 7; col. 11, lines 20-52).

15. As to claim 64, Makela discloses method according to claim 63, characterized in that the step of negotiating comprises a step of generating a list of active applications in order of priority and generating a list of available bearer services and/or related bearer capabilities in the heterogeneous wireless network (col. 4, line 57- col. 5, line 7; col. 11, lines 20-52; col. 9, lines 4-25; col. 19, lines 44-46).

16. As to claim 65, Makela discloses method according to claim 64, characterized in that the step of negotiating further comprises the steps of: assigning the next active application according to the order of priority to an available bearer service according to at least one predetermined rule; updating the list of available bearer services and the list of non-assigned active applications (col. 4, line 57- col. 5, line 7; col. 9, lines 4-25; col. 11, lines 20-52; col. 19, lines 44-46).

17. As to claim 66, Makela discloses method according to claim 63, characterized in that the negotiating and updating steps are repeated while an application is active (col. 4, line 57- col. 5, line 7; col. 9, lines 4-25; col. 11, lines 20-52; col. 19, lines 44-46).

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18. As to claim 67, Makela discloses apparatus for establishing a middleware platform on top of a heterogeneous wireless network in support of at least one application running at a mobile endpoint (col. 7, lines 3-30), characterized by:

characterized by:

a middleware platform unit (col. 6, lines 53-66) adapted to detect an operational context as characteristics of the mobile endpoint, characteristics of at least one application running at the mobile endpoint (col. 4, lines 1-8, "video and telephone applications"; col. 7, lines 40-57, "the application is e.g. a networked game"), characteristics of application data to be transferred and/or availability and capability of at least one bearer service (cols. 3-4, "TABLE I"; col. 3, line 54 – col. 4, line 8; col. 4, lines 23-30);

a bearer management unit (col. 7, lines 3-19, "bearer management") adapted to dynamically select at least one bearer service and setting up/tearing down related wireless connections provided through the heterogeneous wireless network (col. 7, lines 20-30) according to the determined operational context (col. 7, lines 3-19, "channels for communication...according to the properties of the selected bearer service").

19. As to claim 68, it is rejected for the same reasons set forth in claim 57 above.

20. As to claim 69, it is rejected for the same reasons set forth in claim 58 above.

21. As to claim 70, it is rejected for the same reasons set forth in claim 59 above.

22. As to claim 71, it is rejected for the same reasons set forth in claim 60 above.
23. As to claim 72, it is rejected for the same reasons set forth in claim 61 above.
24. As to claim 73, it is rejected for the same reasons set forth in claim 62 above.
25. As to claim 74, it is rejected for the same reasons set forth in claim 63 above.
26. As to claim 75, it is rejected for the same reasons set forth in claim 64 above.
27. As to claim 76, it is rejected for the same reasons set forth in claim 65 above.
28. As to claim 77, it is rejected for the same reasons set forth in claim 66 above.
29. As to claim 78, Makela discloses computer program product directly loadable into the internal memory of a mobile communication middleware platform comprising software code portions for performing the steps of claim 56, when the product is run on a processor of the mobile communication middleware platform (col. 6, lines 53-66).

### ***Conclusion***

30. The prior art made of record and not relied upon is considered pertinent to



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applicant's disclosure:

Michaelis et al, US 2004/0009751, Mulligan et al, US 2003/0095540, Patil, US 2002/0143897, Furuskar et al, US 2002/0102983, Xu et al, US 7,466,719, Forslow, US 2003/0039237 disclose method and system for the optimum selection of bearer service and tag identifies a bearer service with which data may be best transmitted.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNGWON CHANG whose telephone number is (571)272-3960. The examiner can normally be reached on M-F 6:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/  
Primary Examiner, Art Unit 2454

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March 19, 2009